CENTRAL INTELLIGENCE AGENC

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THIS IS UNEVALUATED INFORMATION

1. In 1951 the organization chart of the EKM showed the main headquarters located in Halle. Subsidiary offices, called design offices, were located in several other cities. The design office for diesel motors (KEB Rosslau) was located in Rosslau; for turbines in Dresden; for pumps in Halle; and for power plant equipment in another city.

2. The KEB Rosslau had control over the following subsidiaries:

   a. EKM/Rosslau(Elbe Werk)
   b. EKM/Aben
   c. EKM/Leipzig(Diemo)
   d. EKM/Halberstadt
   e. EKM/Gunewalde
   f. EKM/Bannewitz
   g. EKM/Ludwigsfelde
   h. EKM/Goerlitz(Wumag)
   i. ? /Schoenbeck

The subsidiary units of the other design offices

3. In 1951 the EKM/Rosslau employed forty employees (designers and clerks). The chief in charge was Kurt ROEHME, who was also responsible for the test stand; PRESCHER for two-cycle, MAMMITSCH for plans (?) for large diesels, and WIEDICKE

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for alterations. By 1953 the staff of this office had increased to 120. Kurt BOEHME was still in charge; however, he now had a deputy, Alfred SCHMERSE. TODT took over the test stand.

4. The KEB/Rosslau conducted a great deal of the development work together with the Dresden College of Technology (professors JANTE and HAIDEBROOK), and with ROST, the chief designer for Buckau-Wolf at Magdeburg.

5. The status and production of the subsidiary units of the KEB/Rosslau were as follows:

   a. In 1951 the Elbe Werk at Rosslau mass-produced the four-cycle diesel motor RA-43(three-cylinder inline engine of approximately 36 hp at 1000 rpm). In addition, one-and two-cylinder steam engines were mass-produced. The Elbe Werk also had to supply experimental parts for the engines developed by the KEB.

   b. EKM/Aben manufactured a copy of the small "Deutz" 10 hp diesel. They also produced crankshafts, sleeves, and connecting rods.

   c. EKM/Leipzig(Diemo)produced the RA42,a two-cylinder, four-cycle diesel. Spare engine parts were also manufactured.

   d. EKM/Halberstadt was being constructed in 1951. It was intended that the production of large diesels then done by EKM/Goerlitz would later be shifted to Halberstadt.

   e. EKM/Gunewalde produced gear wheels, pumps, and the small vaporization-cooled diesel LD 130 of approximately 12 hp.

   f. EKM/Bannewitz produced the small one-cylinder varporization-cooled diesel of approximately 8 to 10 hp.

   g. EKM/Ludwigsfelde was being constructed. It will mass-produce a copy of the Daimler-Benz DB25, a 20-cylinder, V-banked, four-cycle diesel of 2500 hp peak output.

   h. Until the summer of 1951, EKM/Goerlitz produced 980 hp marine diesels. It was then divorced from the EKM organization. Production of large diesels was to be continued at Halberstadt.

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   i. whether the Schoenbeck engine plant was part of the EKM.

6. Development work at the KEB/Rosslau during 1951 included improvment of the RA 42 and 43 series, and development of a new series known as the 240 series. The RA 42 and 43 series had some common defects such as poor milling of the crankshaft bearings, cracking cylinder heads, poor piston milling, and burning out of the piston combustion points (the ARCO combustion process was used). 50X1-HUM the preparatory work on the RA43 in order to eliminate the above defects. work involved the testing of the hardened bearing 50X1-HUM positions in the crankshaft, substituting lead-bronze for the previously used white metal, and reducing the length of the bearing. substituted light metal pistons for the cast iron 50X1-HUM pistons, and developed a different combustion system (turbulence chamber instead of the ARCO system).

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7. Technical data of the RA 42 and 43 are as follows:

	RA 42	RA 43
rpm	1000	1000
hp	24	36
weight (kg)	800	1240
fuel consumption gm/hp/hr	210	210

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8. [redacted] to improve the RA 43, [redacted] the data to develop a new series known as the 240 series (name later changed to NDV18). The 240 series were one, two, and three-cylinder, four-cycle diesels, all 1200 to 1500 rpm. The respective rated outputs were 18 hp, 36 hp, and 54 hp. Further developments during this period in 1951 included a 250 series which was different from the 240 series in that the 250 had a larger piston diameter; a two-cycle diesel with one and two cylinders rated respectively as 18 hp and 36 hp.

9. In early 1953 the 240 series (then called the NDV18 series) was being tested on the stand. The three-cylinder model had been running 2000 hours at a 58 hp load. It had hardly any design weaknesses. Some of the construction data are: crankshaft of double-duro hardened StC 45 metal, wet "Perlit" sleeves, aluminum-alloy pistons, "Atmos" bronze bearings (specific surface pressure equals 170 kilograms/square centimeter), whirling chamber, cylinder head of cast-iron, bearings and tie-rods lubricated via the crankshaft, welded oil pan, welded crankcase with engine block welded on, displacement oil pump, manually operated auxiliary oil pump, automatic adjustable fuel injector, and compressed air starter with electric starting possible.

10. Comparison data for the 240 series was as follows:

	240/1	240/2	240/3
rpm	1250	1250	1250(1500 not attempted)
hp	18	36	54(58 actually obtained)
weight	?	?	840
fuel consumption grs/hp/hr	190	190	190

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11. The 250 series [redacted] was capable of producing 80 to 85 hp. [redacted]

12. Other work being done at KEB/Rosslau [redacted] the dismantling and measuring of two DB25 diesels in order to afford Ludwigsfelde the engineering data necessary to build copies, completing the designs and engineering data for the former Junkers aircraft diesel JUMO 205, and completing the engineering data for lightweight diesels of 400 to 500 hp for railroad engines.

13. Due to the fact that EKM/Rosslau had the responsibility of producing the prototypes of motors designed by the KEB/Rosslau, it was planned to improve EKM/Rosslau considerably. New large-and standard-size test stands were being installed, and large workshops for the assembly and erection of toolmaking machines were being built.